

## ABSTRACT OF THE INVENTION

Systems and methods are provided for selecting parameter values and combinations of parameter values to use in connection with testing. A graphical user interface allows a user to graphically illustrate the importance of parameter values by drawing a probability curve for each parameter. The resulting curves are then converted to mathematical functions that are then combined into a combination function. The combination function is then evaluated for different parameter value combinations. The parameter value combinations that cause the combination function to exceed a predetermined probability value are selected for testing.